

SEQUENCE LISTING

<110> Wang, Yi
 Mueller, John P.
 Matis, Louis A.
 <120> Chimeric Protiens and uses thereof for the Diagnosis,
 Prevention, and Treatment of Diabetes
 <130> ALX-156 PCT
 <140> Not Yet Assigned
 <141> 1998-12-18
 <150> 60/068,648
 <151> 1997-12-22
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 <170> PatentIn Ver. 2.0
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 Lys Met Phe Pro Glu Val Lys Glu Lys Gly Met Ala Ala Leu Pro Arg
 50 55 60
 Leu Ile Ala Phe Thr Ser Glu Lys Cys Leu Glu Leu Ala Glu Tyr Leu
 65 70 75 80
 Tyr Asn Ile Ile Lys Asn Arg Glu Gly Tyr Glu Met Val Phe Asp Gly
 85 90 95
 Lys Pro Gln His Thr Asn Val Cys Phe Trp Tyr Ile Pro Pro Ser Leu
 100 105 110
 Arg Thr Leu Glu Asp Asn Glu Glu Arg Met Ser Arg Leu Ser Lys Val
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[illegible]

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Ser Phe Asp Asn Met Tyr Ala Met Met Ile Ala Arg Phe Lys Met Phe
  50                    55                      60
Pro Glu Val Lys Glu Lys Gly Met Ala Ala Leu Pro Arg Leu Ile Ala
  65              70              75              80
Phe Thr Ser Glu His Ser His Phe Ser Leu Lys Lys Cys Leu Glu Leu
                85              90              95
Ala Glu Tyr Leu Tyr Asn Ile Ile Lys Asn Arg Glu Gly Tyr Glu Met
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Val Phe Asp Gly Lys Pro Gln His Thr Asn Val Cys Phe Trp Tyr Ile
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Pro Pro Ser Leu Arg Thr Leu Glu Asp Asn His His His His His
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 Val Val Lys Ser Phe Asp Asn Met Tyr Ala Met Met Ile Ala Arg Phe
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 Lys Met Phe Pro Glu Val Lys Glu Lys Gly Met Ala Ala Leu Pro Arg
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 35 40 45
 Pro Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln
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 Lys Arg Gly Thr Asn Met Phe Thr Tyr Glu Ile Ala Pro Val Phe Val
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 Leu Leu Glu Tyr Val Thr Leu Lys Lys Met Arg Glu Ile Ile Gly Trp
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 Pro Gly Gly Ser Gly Asp Gly Gly Gly Met Asn Ile Leu Leu Gln Tyr
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 Val Val Lys Ser Phe Asp Asn Met Tyr Ala Met Met Ile Ala Arg Phe
 115 120 125
 Lys Met Phe Pro Glu Val Lys Glu Lys Gly Met Ala Ala Leu Pro Arg
 130 135 140
 Leu Gly Gly Gly Ile Ala Phe Thr Ser Glu His Ser His Phe Ser Leu
 145 150 155 160
 Lys Lys Gly Ala Ala Ala Leu Gly Ile Gly Thr Asp Ser Val Ile Gly
 165 170 175
 Gly Gly Tyr Ile Pro Pro Ser Leu Arg Thr Leu Glu Asp Asn Glu Glu
 180 185 190
 Arg Met Ser Arg Leu Ser Lys Val Ala Pro Val Ile Lys Ala Arg Met
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 35 40 45
 Pro Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln
 50 55 60
 Lys Arg Gly Thr Asn Met Phe Thr Tyr Glu Ile Ala Pro Val Phe Val
 65 70 75 80
 Leu Leu Glu Tyr Val Thr Leu Lys Lys Met Arg Glu Ile Ile Gly Trp
 85 90 95
 Pro Gly Gly Ser Gly Asp Gly Gly Gly Met Asn Ile Leu Leu Gln Tyr
 100 105 110
 Val Val Lys Ser Phe Asp Asn Met Tyr Ala Met Met Ile Ala Arg Phe
 115 120 125
 Lys Met Phe Pro Glu Val Lys Glu Lys Gly Met Ala Ala Leu Pro Arg
 130 135 140
 Leu Gly Gly Gly Ile Ala Phe Thr Ser Glu His Ser His Phe Ser Leu
 145 150 155 160
 Lys Lys Gly Ala Ala Leu Gly Ile Gly Thr Asp Ser Val Ile Gly
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 Gly Gly Ile Glu His Asp Pro Arg Met Pro Ala Tyr Ile Ala Thr Gln
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 Gly Pro Leu Ser His Thr Ile Ala Asp Phe Trp Gln Met Val Trp Glu
 195 200 205
 Ser Gly Cys Thr Val Ile Val Met Leu Thr Pro Leu Val Glu Asp Gly
 210 215 220
 Val Lys Gln Cys Asp Arg Tyr Trp Pro Asp Glu Gly Ala Ser Leu Tyr
 225 230 235 240
 His Val Tyr Glu Val Asn Leu Val Ser Glu His Ile Trp Cys Glu Asp
 245 250 255
 Phe Leu Val Arg Ser Phe Tyr Leu Lys Asn Val Gln Thr Gln Glu Thr
 260 265 270
 Arg Thr Leu Thr Gln Phe His Phe Leu Ser Trp Pro Ala Glu Gly Thr
 275 280 285
 Pro Ala Ser Thr Arg Pro Leu Leu Asp Phe Arg Arg Lys Val Asn Lys
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 Cys Tyr Arg Gly Arg Ser Cys Pro Ile Ile Val His Cys Ser Asp Gly
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 Ala Gly Arg Thr Gly Thr Tyr Ile Leu Ile Asp Met Val Leu Asn Arg
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 Met Ala Lys Gly Val Lys Glu Ile Asp Ile Ala Ala Thr Leu Glu His
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 Val Arg Asp Gln Arg Pro Gly Leu Val Arg Ser Lys Asp Gln Phe Glu
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 35 40 45
 Pro Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln
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 Lys Arg Gly Thr Asn Met Phe Thr Tyr Glu Ile Ala Pro Val Phe Val
 65 70 75 80
 Leu Leu Glu Tyr Val Thr Leu Lys Lys Met Arg Glu Ile Ile Gly Trp
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 Pro Gly Gly Ser Gly Asp Gly Gly Gly Met Asn Ile Leu Leu Gln Tyr
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 Val Val Lys Ser Phe Asp Asn Met Tyr Ala Met Met Ile Ala Arg Phe
 115 120 125
 Lys Met Phe Pro Glu Val Lys Glu Lys Gly Met Ala Ala Leu Pro Arg
 130 135 140
 Leu Gly Gly Gly Ile Ala Phe Thr Ser Glu His Ser His Phe Ser Leu
 145 150 155 160
 Lys Lys Gly Ala Ala Ala Leu Gly Ile Gly Thr Asp Ser Val Ile Gly
 165 170 175
 Gly Gly Tyr Ile Pro Pro Ser Leu Arg Thr Leu Glu Asp Asn Glu Glu
 180 185 190
 Arg Met Ser Arg Leu Ser Lys Val Ala Pro Val Ile Lys Ala Arg Met
 195 200 205
 Met Glu Tyr Gly Thr Thr Met Val Ser Tyr Gln Pro Leu Gly Asp Lys
 210 215 220
 Val Asn Gly Gly Gly Ile Glu His Asp Pro Arg Met Pro Ala Tyr Ile
 225 230 235 240
 Ala Thr Gln Gly Pro Leu Ser His Thr Ile Ala Asp Phe Trp Gln Met
 245 250 255
 Val Trp Glu Ser Gly Cys Thr Val Ile Val Met Leu Thr Pro Leu Val
 260 265 270
 Glu Asp Gly Val Lys Gln Cys Asp Arg Tyr Trp Pro Asp Glu Gly Ala
 275 280 285
 Ser Leu Tyr His Val Tyr Glu Val Asn Leu Val Ser Glu His Ile Trp
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 Cys Glu Asp Phe Leu Val Arg Ser Phe Tyr Leu Lys Asn Val Gln Thr
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 Gln Glu Thr Arg Thr Leu Thr Gln Phe His Phe Leu Ser Trp Pro Ala
 325 330 335
 Glu Gly Thr Pro Ala Ser Thr Arg Pro Leu Leu Asp Phe Arg Arg Lys
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 Val Asn Lys Cys Tyr Arg Gly Arg Ser Cys Pro Ile Ile Val His Cys
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 Gln Phe Glu Phe Ala Leu Thr Ala Val Ala Glu Glu Val Asn Ala Ile
 420 425 430
 Leu Lys Ala Leu Pro Gln His His His His His His
 435 440

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<211> 173

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:IG4NHB
 hypothetical fusion protein

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 Tyr Leu Val Cys Gly Glu Arg Gly Phe Phe Tyr Thr Pro Lys Thr Arg
 20 25 30
 Arg Glu Ala Glu Asp Leu Gln Val Gly Gln Val Glu Leu Gly Gly Gly
 35 40 45
 Pro Gly Ala Gly Ser Leu Gln Pro Leu Ala Leu Glu Gly Ser Leu Gln
 50 55 60
 Lys Arg Gly Met Asn Ile Leu Leu Gln Tyr Val Val Lys Ser Phe Asp
 65 70 75 80
 Asn Met Tyr Ala Met Met Ile Ala Arg Phe Lys Met Phe Pro Glu Val
 85 90 95
 Lys Glu Lys Gly Met Ala Ala Leu Pro Arg Leu Ile Ala Phe Thr Ser
 100 105 110
 Glu His Ser His Phe Ser Leu Lys Lys Cys Leu Glu Leu Ala Glu Tyr
 115 120 125
 Leu Tyr Asn Ile Ile Lys Asn Arg Glu Gly Tyr Glu Met Val Phe Asp
 130 135 140
 Gly Lys Pro Gln His Thr Asn Val Cys Phe Trp Tyr Ile Pro Pro Ser
 145 150 155 160
 Leu Arg Thr Leu Glu Asp Asn His His His His His His
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<210> 9

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Helix breaker

<400> 9

Pro Pro Pro
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<210> 10

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Helix breaker

<400> 10

Gly Gly Gly
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<210> 11

<211> 139

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:prIG1 primer

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atgtatgcca tgatgatcg 139

<210> 12

<211> 143

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:prIG2 primer

<400> 12

ggtttttaat gatgttgtag agatattccg ccagttccag acatttttca gaggttaaagg 60
caatcagacg cggcagcgcg gccatacctt tttctttaac ttccgggaac attttaaacg 120
gcgcatcat catgcatatc atg 143

<210> 13

<211> 138

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:prIG3 primer

<400> 13

gtacaacatc attaaaaacc gcgaaggcta tgaaatgggt ttcatggta aaccgcagca 60
taccaacgtt tgcttttggt acatcccgcc gagcctgcgt accctggaag ataacgaaga 120
acgcatgagc cgtctgtc 138

<210> 14

<211> 132

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:prIG4 primer

<400> 14

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catggtggtg ccatattcca tcatgcgcgc ttaataaacc ggggcaactt tagacagacg 120
gctcatgcgt tc 132

<210> 15

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:prIG5 primer

<400> 15

catatgttcg ttaaccag 18

<210> 16

<211> 18

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:prIG6 primer

<400> 16

ggatccttaa tggatgatg 18

<210> 17

<211> 492

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:IG1 Fusion
Protein coding sequence

<400> 17

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gaacgcatga gccgtctgtc taaagttgcc ccggttatta aagcgcgcat gatggaatat 420
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<211> 64

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:prIG7 primer

<400> 18

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gatg 64

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<210> 19

<211> 78

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:prIG8 primer

<400> 19

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taaaggcaat cagacgcg 78

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<210> 20

<211> 27

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:prIG12 primer

<400> 20

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tgtacagata ttccgccagt tccagac 27

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<210> 21

<211> 552

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:IG2 Fusion
Protein coding sequence

<400> 21

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gaacgcatga gccgtctgtc taaagttgcc ccggttatta aagcgcgcat gatggaatat 480
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cattaaggat cc 552

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 <210> 23
 <211> 444
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence:IG3 Fusion
 Protein coding sequence
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 aacattctgc tgcagtatgt tgttaaaagc ttcgataaca tgtatgccat gatgatcgcg 180
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 <210> 24
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 <212> DNA
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 <223> Description of Artificial Sequence:IG4 Fusion
 Protein coding sequence
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 <210> 25
 <211> 24
 <212> DNA
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 <223> Description of Artificial Sequence:prIG14 primer
 <400> 25
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 <223> Description of Artificial Sequence:prIG15 primer
 <400> 26

gctgcttgca ccagggcccc cgcccagctc cacctgcccc acctgcagat ctccgcttc 60
acgacgggt 69

<210> 27

<211> 66

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:prIG16 primer

<400> 27

agtgccacgc ttctgcaggg acccctccag ggccaagggc tgcaggctgc ctgcaccagg 60
gcccc 66

<210> 28

<211> 69

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:prIG17 primer

<400> 28

ttccaaaagc acaaatactg gagcaatttc ataggtgaac atgttagtgc cagccttctg 60
cagggaccc 69

<210> 29

<211> 69

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:prIG18 primer

<400> 29

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tactggagc 69

<210> 30

<211> 69

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:prIG19 primer

<400> 30

agagaaatca ttggctggcc agggggctct ggcgatggag gcggtatgaa cattctgctg 60
cagtatgtt 69

<210> 31

<211> 68

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:prIG20 primer

<400> 31

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ggccatac 68

<210> 32

<211> 69

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:prIG21 primer

<400> 32

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atgttcaga

<210> 33

<211> 60

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:prIG22 primer

<400> 33

ttagggattg gaacagacag cgtgattgga ggcgggtaca tcccgcgcag cctgcgtacc 60

<210> 34

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:prIG23 primer

<400> 34

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24

<210> 35

<211> 708

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:IG5 Fusion

Protein coding sequence

<400> 35

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<210> 36

<211> 1191

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:IG6 Fusion

Protein coding sequence

<400> 36

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sub A1

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<211> 1344

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:IG7 Fusion

Protein coding sequence

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